Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-11 (Cancelled).

12. (New) A drug delivery device for oral administration, and colonic release, of an active agent, comprising:

a) an active agent capable of inactivating an antibiotic, and

b) a drug delivery device suitable for administering the active agent to the colon.

13. (New) The drug delivery device of Claim 12, wherein the active agent is an enzyme capable of inactivating macrolide or quinolone antibiotics.

14. (New) The drug delivery device of Claim 13, wherein the enzyme capable of inactivating macrolide antibiotics is erythromycin esterase.

15. (New) The drug delivery device of Claim 12, wherein the device comprises beads of pectin in the form of a cationic salt enclosing the active agent.

16. (New) The drug delivery device of Claim 15, wherein the pectin is reticulated by a cationic polymer.

17. (New) The drug delivery device of Claim 15, wherein the pectin salt is a calcium pectinate.

18. (New) The drug delivery device of Claim 15, wherein the pectin is an amidated pectin.

19. (New) A method of reducing the concentration of an antibiotic in the colon of a patient, comprising orally administering the drug delivery device of Claim 1 to a patient who has been, is being, or will be administered an antibiotic.

20. (New) The method of Claim 19, wherein the active agent in the drug delivery device is an enzyme capable of inactivating macrolide or quinolone antibiotics.

21. (New) The method of Claim 20, wherein the enzyme capable of inactivating macrolide antibiotics is erythromycin esterase.

22. (New) The method of Claim 19, wherein the device comprises beads of pectin in the form of a cationic salt enclosing the active agent.

23. (New) The method of Claim 22, wherein the pectin is reticulated by a cationic polymer.

24. (New) The method of Claim 22, wherein the pectin salt is a calcium pectinate.

25. (New) The method of Claim 22, wherein the pectin is an amidated pectin.

26. (New) A method of preparing a drug delivery device for oral administration, and colonic delivery, of an active agent that inactivates an antibiotic, comprising:

a) preparing a 4-10% (m/v) pectin solution that includes an active agent that inactivates an antibiotic,

b) adding the pectin solution to a 2-10% (m/v) calcium chloride solution to form pectin cationically crosslinked beads, and

c) reticulating the pectin beads with a 0.5-2% (m/v) polyethylenimine solution.

27. (New) The method of Claim 26, wherein the pectin solution further comprises a second active agent, where the second active agent is an antibiotic, an anti-inflammatory compound, an anti-histamine, an anti-cholinergic, an antiviral, an antimitotic, a peptide, a protein, a gene, an anti-sense oligonucleotide, a diagnostic agent, an immunosuppressive agent or a bacteria.

28. (New) A drug delivery device comprising an active agent capable of inactivating a macrolide, tetracycline or quinolone antibiotic.

29. (New) The drug delivery device of Claim 28, wherein the device is suitable for administering the active agent to the colon.

30. (New) The drug delivery device of Claim 28, wherein the active agent is an enzyme capable of inactivating macrolide or quinolone antibiotics.

31. (New) The drug delivery device of Claim 30, wherein the enzyme capable of inactivating macrolide antibiotics is erythromycin esterase.

32. (New) The drug delivery device of Claim 28, wherein the device comprises beads of pectin in the form of a cationic salt enclosing the active agent.

33. (New) The drug delivery device of Claim 32, wherein the pectin is reticulated by a cationic polymer.

34. (New) The drug delivery device of Claim 32, wherein the pectin salt is a calcium pectinate.

35. (New) The drug delivery device of Claim 32, wherein the pectin is an amidated pectin.

36. (New) The drug delivery device of Claim 28, further comprising a second active agent, wherein the second agent is an antibiotic, an anti-inflammatory compound, an anti-histamine, an anti-cholinergic, an antiviral, an antimitotic, a peptide, a protein, a gene, an anti-sense oligonucleotide, a diagnostic agent, an immunosuppressive agent or a bacteria.

37. (New) A method of reducing the concentration of a macrolide, tetracycline or quinolone antibiotic in the colon of a patient, comprising orally administering an effective, antibiotic-reducing amount of the drug delivery device of Claim 28 to a patient who has been, is being, or will be administered a macrolide, tetracycline or quinolone antibiotic.

38. (New) The method of Claim 37, wherein the drug delivery device administers the active agent to the colon.

39. (New) The method of Claim 37, wherein the active agent in the drug delivery device is an enzyme capable of inactivating macrolide or quinolone antibiotics.

40. (New) The method of Claim 39, wherein the enzyme capable of inactivating macrolide antibiotics is erythromycin esterase.

41. (New) The method of Claim 37 wherein the device comprises beads of pectin in the form of a cationic salt enclosing the active agent.

42. (New) The method of Claim 41, wherein the pectin is reticulated by a cationic polymer.

43. (New) The method of Claim 41, wherein the pectin salt is a calcium pectinate.

44. (New) The method of Claim 41, wherein the pectin is an amidated pectin.

45. (New) A drug delivery device comprising:

a) a pectin and

b) an active agent capable of inactivating an antibiotic.

46. (New) The drug delivery device of Claim 45, wherein the device is suitable for administering the active agent to the colon.

47. (New) The drug delivery device of Claim 45, wherein the active agent is an enzyme capable of inactivating macrolide or quinolone antibiotics.

48. (New) The drug delivery device of Claim 47, wherein the enzyme capable of inactivating macrolide antibiotics is erythromycin esterase.

49. (New) The drug delivery device of Claim 45, further comprising a metal cation.

50. (New) The drug delivery device of Claim 49, wherein the cation is a calcium ion.

51. (New) The drug delivery device of Claim 50, further comprising a cationic polymer.

52. (New) The drug delivery device of Claim 45, wherein the device comprises beads of pectin in the form of a cationic salt enclosing the active agent.

53. (New) The drug delivery device of Claim 52, wherein the pectin is reticulated by a cationic polymer.

54. (New) The drug delivery device of Claim 52, wherein the pectin salt is a calcium pectinate.

55. (New) The drug delivery device of Claim 52, wherein the pectin is an amidated pectin.

56. (New) A method of reducing the concentration of an antibiotic in the colon of a patient, comprising orally administering an effective, antibiotic-reducing amount of the drug delivery device of Claim 45 to a patient who has been, is being, or will be administered an antibiotic.

57. (New) The method of Claim 56, wherein the drug delivery device comprises an enzyme capable of inactivating macrolide or quinolone antibiotics.

58. (New) The method of Claim 57, wherein the enzyme capable of inactivating macrolide antibiotics is erythromycin esterase.

59. (New) A drug delivery device comprising:

a) a first active agent capable of inactivating an antibiotic, and

b) a second active agent, where the second active agent is an antibiotic, an anti-inflammatory compound, an anti-histamine, an anti-cholinergic, an antiviral, an antimitotic, a peptide, a protein, a gene, an anti-sense oligonucleotide, a diagnostic agent, an immunosuppressive agent or a bacteria.

60. (New) The drug delivery device of Claim 59, wherein the device is suitable for administering the active agents to the colon.

61. (New) The drug delivery device of Claim 59, wherein the first active agent is an enzyme capable of inactivating macrolides or quinolones.

62. (New) The drug delivery device of Claim 61, wherein the enzyme capable of inactivating macrolides is erythromycin esterase.

63. (New) The drug delivery device of Claim 59, wherein the device comprises beads of pectin in the form of a cationic salt enclosing the active agents.

64. (New) The drug delivery device of Claim 63, wherein the pectin is reticulated by a cationic polymer.

65. (New) The drug delivery device of Claim 59, wherein the second active agent is specific for treating ulcerative colitis or Crohn's disease.

66. (New) A method of reducing the concentration of an antibiotic in the colon of a patient, comprising orally administering an effective, antibiotic-reducing amount of the drug delivery device of Claim 60 to a patient who has been, is being, or will be administered an antibiotic.

67. (New) The method of Claim 66, wherein the drug delivery device comprises an enzyme capable of inactivating macrolides or quinolones.

68. (New) The method of Claim 67, wherein the enzyme capable of inactivating macrolides is erythromycin esterase.

69. (New) The method of Claim 66, wherein the second active agent is specific for treating ulcerative colitis or Crohn's disease.